

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-16. (Canceled)

17. (Previously presented) A corrosion resistant member comprising a  $Y_2O_3$  sintered material that includes 99.9% by weight or more Y in terms of  $Y_2O_3$ , wherein

said  $Y_2O_3$  sintered material comprises at least metal element of AE, wherein AE is a group II element of the periodic table, and

wherein a difference in crystal grain size between the surface and the inside region of said  $Y_2O_3$  sintered material is not larger than 30  $\mu m$ .

18. (Previously presented) The corrosion resistant member according to claim 17, wherein said  $Y_2O_3$  sintered material further comprises any one of Si, Fe and Al.

19. (Currently amended) The corrosion resistant member according to claim 17, wherein said  $Y_2O_3$  sintered material further comprises ~~any of a group of metallic elements consisting of~~ a non zero amount of Si, Fe, Al and AE (these metallic elements will hereinafter be collectively referred to as metal elements M), in concentrations of 300 ppm or less for Si in terms of  $SiO_2$ , 50 ppm or less for Fe in terms of  $Fe_2O_3$ , 100 ppm or less Al in terms of  $Al_2O_3$  and 350 ppm or less AE, wherein AE is a group II element of the periodic table, in terms of AEO, wherein AEO is a compound containing the AE and O.

20. (Previously presented) The corrosion resistant member according to claim 19, wherein the content ratio of any of the metal elements M contained at and near the surface to that contained deep inside of said  $Y_2O_3$  sintered material is in a range from 0.2 to 5.

21. (Previously presented) The corrosion resistant member according to claim 17, wherein said  $Y_2O_3$  sintered material shows dielectric loss tangent of  $2 \times 10^{-3}$  or less in a frequency range from 10 MHz to 5 GHz.

22. (Currently amended) The corrosion resistant member according to claim 17, ~~wherein the~~ having a carbon content in said  $Y_2O_3$  sintered material that is 100 ppm by weight or less.

23. (Previously presented) The corrosion resistant member according to claim 17, wherein said  $Y_2O_3$  sintered material has void ratio of 5% or less.

24. (Previously presented) The corrosion resistant member according to claim 17, wherein said  $Y_2O_3$  sintered material has density of  $4.8 \text{ g/cm}^3$  or higher.

25-27. (Canceled)